

OPTICAL RANGE FINDER HAVING A MICRO-MIRROR ARRAY

Abstract of the Disclosure

An optical range finder for determining the distance of an object may comprise an optical source of electromagnetic radiation. A focusing optical member focuses the electromagnetic radiation upon a micro-mirror array. A processor controls the micro-mirror array to direct the focused electromagnetic radiation in a defined direction or a defined radiation pattern. A transmission optical member focuses the defined radiation pattern toward an object. A reception optical member receives electromagnetic radiation reflected from the object. A detector detects the receipt of the reflected electromagnetic radiation. A timer determines an elapsed time between transmission of the electromagnetic radiation to the object and receipt of the electromagnetic radiation from the object. A data processor converts elapsed time into a distance between the object and a reference point.

Assignment

The entire right, title and interest in and to this application and all subject matter disclosed and/or claimed therein, including any and all divisions, continuations, reissues, etc., thereof are, effective as of the date of execution of this application, assigned, transferred, sold and set over by the applicant(s) named herein to Deere & Company, a Delaware corporation having offices at Moline, Illinois 61265, U.S.A., together with all rights to file, and to claim priorities in connection with, corresponding patent applications in any and all foreign countries in the name of Deere & Company or otherwise.